#### UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: VICKERS et al.

Docket No: 21521-300101

Serial No:

Not assigned

Group Art Unit Not Assigned

Filed:

Herewith

Examiner: Not Assigned

For: "METHOD AND APPARATUS FOR AUDIO LOUDNESS AND DYNAMICS MATCHING"

**Assistant Commissioner for Patents** Washington, D.C. 20231

#### INFORMATION DISCLOSURE STATEMENT

Applicants submits herewith the references listed on the attached form PTO-1449 of which Applicants are aware that may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), nor as an admission that the information cited is, or is considered to be, material to patent ability, nor an admission that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Respectfully submitted,

DATE: January 9, 2002

P. François de Villiers

Reg. No: 48,200

OPPENHEIMER WOLFF & DONNELLY LLP

P.O. Box 10356

Palo Alto, CA 94303

(650) 320-4000

In the event any parts of this application are missing, please treat this as a filing under 37 CFR 1.53 as defined just above.

**CERTIFICATE OF MAILING (37 CFR 1.10(A))** 

CERTIFICATE OF MAILING BY "EXPRESS MAIL" - Rule 10: I hereby certify that this correspondence is being deposited with the U. S. Postal Service "Express Mail Post Office to Addressee" under 37 CFR 1.10 as Express Mail No. EL745082012US addressed to the Box New Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

Date: January 9, 2002

(Information Disclosure Statement)

# Form 1449 (Modified)

Docket No. 21521-300101

Application No.: Not assigned

**Information Disclosure Statement By Applicant**  Applicant: Vickers et al.

Filing Date: Herewith

Group: Unass

(Use Several Sheets if Necessary)

## U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
	A		- T				
	В						1
	C						
	D						
	E						
	F						
	G						1
	H						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub- class	 lation No
	L						

### **Other Documents**

Examiner						
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication				
	M	Sound Forge Product Literature,				
	·	www.sonicfoundry.com/products/NewShowProduct.asp?PID+426,				
		date unknown				
	N	Neoran et al., "A Perspective Loudness-Sensitive Leveler for Audio				
	Broadcasting and Mastering", date unknown					
	0	Dolby Laboratories, Inc., "A Guide to Dolby Metadata", date unknown				
	P	Vickers, "Automatic Long-Term Loudness and Dynamics Matching", Audio				
		Engineering Society 111th Convention, Sept. 21-24, 2001.				
	R	Kraight, "Aliasing in Digital Clippers and Compressors" J. Audio Eng. Soc.,				
		Vol. 48, No. 11, Nov. 2000, pp. 1060-1065.				
	S	Floru, "Attack and Release Time Constants in RMS-Based Feedback				
		Compressors", J. Audio Eng. Soc., Vol. 47, No. 10, October 1999, pp.788-				
		803.				
	T	Robinson, et al. "Dynamic Range Control via Metadata" AES 107 <sup>th</sup>				
		Convention, Sept. 24-27, 1999.				
Examiner		Date Considered				

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Docket No. 21521-300101 Application No.: Not

assigned

Information Disclosure Statement By Applicant Applicant: Vickers et al.

Applicant. Vickers et al.

(Use Several Sheets if Necessary)

Filing Date: Herewith

Group: Unassigned

**U.S. Patent Documents** 

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing B
	A						+
	В	<u></u>					
	C						
	D	Ĭ .					
	E						
	F.						
	G					1	
	H					1	

Foreign Patent or Published Foreign Patent Application

Examiner		Document	Publication	•		Sub-	Trans	lation
Initial	No.	No.	Date	Patent Office	Class	class	Yes	No
	L							

### **Other Documents**

Examiner		
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
	M	Zwicker, et al. "Psychoacoustics", January 1999, pp.315-325.
	N	Dutilleux, "Filters, Delays, Modulations and Demodulations A Tutorial", ZKM Institute for Music and Acoustics, November 19-21, 1998.
	0	Dolby Laboratories, Inc. "Dolby Digital Broadcast Implementation Guidelines", 1998.
	P	Moore, "A Model for the Prediction of Thresholds, Loudness, and Partial Loudness", J. Audio Eng. Soc., Vol. 45, No. 4, April 1997, pp. 224-239.
	R	Allen, "Are Movies Too Loud?", SMPTE Film Conference, March 22, 1997.
	S	Stone, "Dynamic aspects of loudness: A real-time loudness meter", British Journal of Audiology, Vol. 30, 1996.
	T	Zolzer, "Digital Audio Signal Processing", Technical University of Hamburg-Harburg, Germany, 1995, pp. 207-219.
Examiner		Date Considered

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified)	Docket No. 21521-300101	Application No.: Not assigned
Information Disclosure Statement By Applicant	Applicant: Vickers et al. Filing Date: Herewith	Group: Unassigned
(Use Several Sheets if Necessary)	Timig Date. Helewith	Group. Onassigned

## U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
	Α						
-	В						
	С						
	D						
	E						
	F						
	G						
	H						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub- class	Trans Yes	lation No
	L							

# Other Documents

Examiner		
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
	М	Bateman, et al., "Digital Signal Processing Design", Computer Science Press, 1989, pp. 307-311.
	N	McNally, "Dynamic Range Control of Digital Audio Signals", J. Audio Eng. Soc., Vol. 32, No. 5, May 1984, pp. 316-327.
	0	Zwicker, "Critical Band Width in Loudness Summation", The Journal of The Acoustical Society of America, Vol. 20, No. 5, May 1957, pp. 548-557.
-	P	r
	R	
	S	
	T	
Examiner	•	Date Considered

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.